BIAS SIGNAL GENERATOR IN RADIO RECEIVER

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Abstract of the Disclosure

A single chip superhetrodyne AM receiver is disclosed herein. To compensate for process variations in the implementation of the IC, bias currents setting the operating conditions for various amplifiers and other components in the system are adjusted based on frequency control signals in a PLL circuit in the local oscillator. Since the magnitude of the control signal reflects the process variations, the bias currents are adjusted based on the control signal to offset these variations in other portions of the receiver. To further improve the signal to noise ratio of the receiver, the IF filter is tuned within a range so as not to include any integer multiple or integer divisor of the timing reference frequency. Various techniques are described for enabling a complete superhetrodyne AM receiver to be implemented on a single chip which receives an antenna input signal and outputs a digital data signal.